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FEBRUARY 1991
SEMIANNUAL GROUND WATER SAMPLING RESULTS
LIVINGSTON RAIL YARD
LIVINGSTON, MONTANA

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FEBRUARY 1991
SEMIANNUAL GROUND WATER SAMPLING RESULTS
LIVINGSTON RAIL YARD
LIVINGSTON, MONTANA

Submitted to:

Montana Department of Health
and Environmental Sciences
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Submittal Date:

July 10, 1991

ENVIROCON, INC.

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APPENDICES

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1.0 INTRODUCTION

Burlington Northern Railroad Co. (BNRR), via its contractor Envirocon, Inc., completed the February 1991 semiannual sampling round at the Livingston rail yard between February 20 and 22, 1991. Envirocon took a total of 43 ground water samples of the following types:

TABLE 1.0

February 1991 Semiannual Samples
Livingston Rail Yard

SAMPLE TYPE	NUMBER OF SAMPLES
Monitoring and Private Wells	35
Monitoring and Private Well Duplicates	4
B Street Municipal Well	1
Trip Blanks	2
Equipment Blanks	1
Total Number of Samples	43

The sample numbers, sample locations, sampling methods and dates, and analytical methods are shown on Table 2.0. All samples were analyzed for total petroleum hydrocarbons (TPHs) by EPA Method 418.1. All samples were analyzed for volatile organic compounds (VOCs) by EPA Method 524.2, except those from Wells LS-7 and LS-10.

TABLE 2.0

CORRELATION OF WELL AND SAMPLE NUMBERS
FEBRUARY - 1991

SAMPLE NUMBER	WELL NUMBER	ANALYTICAL METHOD*	SAMPLE METHOD**	SAMPLE DATE
140101-656	Trip Blank	524.2	N/A	2/19/91
140101-657	LS-7	418.1	DBP	2/19/91
140101-658	L-87-1	524.2, 418.1	DBP	2/19/91
140101-659	LS-6	524.2, 418.1	DBP	2/19/91
140101-660	LG-10	524.2, 418.1	DBP	2/19/91
140101-661	4	524.2, 418.1	DBP	2/19/91
140101-662	Dup of 4	524.2, 418.1	DBP	2/19/91
140101-663	2	524.2, 418.1	DBP	2/19/91
140101-664	5	524.2, 418.1	DBP	2/19/91
140101-665	6	524.2, 418.1	DBP	2/19/91
140101-666	7	524.2, 418.1	DBP	2/19/91
140101-668	89-2	524.2, 418.1	DBP	2/20/91
140101-669	89-1	524.2, 418.1	DBP	2/20/91
140101-670	90-3	524.2, 418.1	DBP	2/20/91
140101-671	LS-11	524.2, 418.1	DBP	2/20/91
140101-672	1	524.2, 418.1	DBP	2/20/91
140101-673	L-87-4	524.2, 418.1	DBP	2/20/91
140101-674	Dup of L-87-4	524.2, 418.1	DBP	2/20/91
140101-675	L-87-2	524.2, 418.1	DBP	2/20/91
140101-676	L-87-3	524.2, 418.1	DBP	2/20/91
140101-677	L-88-12	524.2, 418.1	DBP	2/20/91
140101-678	89-11	524.2, 418.1	DBP	2/21/91
140101-679	89-9	524.2, 418.1	DBP	2/21/91
140101-680	89-3	524.2, 418.1	DBP	2/21/91
140101-681	Dup of 89-3	524.2, 418.1	DBP	2/21/91
140101-682	89-4	524.2, 418.1	DBP	2/21/91
140101-683	L-87-7	524.2, 418.1	DBP	2/21/91
140101-684	L-87-8	524.2, 418.1	DBP	2/21/91
140101-685	L-88-13	524.2, 418.1	DBP	2/21/91
140101-686	L-88-10	524.2, 418.1	DBP	2/21/91
140101-687	LS-8	524.2, 418.1	DBP	2/21/91
140101-688	B Street	524.2, 418.1	Tap	2/21/91
140101-689	Trip Blank	524.2	N/A	2/22/91
140101-690	8	524.2, 418.1	SSB	2/22/91
140101-691	POTW	524.2, 418.1	Tap	2/22/91
140101-692	LS-10	418.1	NDBP	2/22/91
140101-693	89-7	524.2, 418.1	NDBP	2/22/91
140101-694	L-87-5	524.2, 418.1	DBP	2/22/91
140101-695	Dup of 89-7	524.2, 418.1	NDBP	2/22/91
140101-696	Equipment Blank	524.2	N/A	2/22/91
140101-697	89-6	524.2, 418.1	NDBP	2/22/91
140101-698	89-10	524.2, 418.1	NDBP	2/22/91

NOTE: * Refers to EPA analytical method
**DBP - Dedicated bladder pump
NDBP - Non-dedicated bladder pump
SSB - Stainless steel bailer
N/A - Not applicable

The wells scheduled to be sampled during the semiannual sampling rounds are included in Amendment 5-2 to the Interim Remedial Measures Work Plan (IRMWP). However, the D Street Well, the Rainbow Motel Well, and Monitor Well 11 could not be sampled during February 1991. The pump of the D Street Well was not operating during February and the well could not be sampled. The Rainbow Motel Well had been winterized and could not be sampled. Monitor Well 11 did not contain sufficient water to allow sampling. The Montana Department of Health and Environmental Sciences (MDHES) took a total of eight split samples from seven locations.

All of Envirocon's samples were analyzed by Energy Laboratories, Inc. (ELI) of Billings, Montana. The MDHES split samples were analyzed at the state laboratory in Helena, Montana.

The interpretations presented in this report are necessarily based on the information available at the time of publication. Interpretations may change when further data is available.

2.0 SUMMARY

The Livingston aquifer contains a plume of VOCs stretching from the rail yard shop complex eastward toward the Yellowstone River. The primary VOCs in the Livingston aquifer are the chlorinated ethenes (CEs): tetrachloroethene (PCE), trichloroethene (TCE), and dichloroethene (DCE) and the chlorinated aromatic chlorobenzene. These VOCs are derived from more than one source on the rail yard. The two largest known CE source areas are the northwest corner of the Electric Shop, where a vapor degreaser was operated, and the Waste Water Treatment Plant (WWTP) sump. Other known sources include parts of the industrial drain lines and the API separator and overflow pond. The largest VOC concentrations detected on the rail yard during the February 1991 semiannual sampling round were 340 parts per billion (ppb) of PCE, at Well 89-4, and 240 ppb of PCE, at Well 89-3.

The plume of diesel fuel (free product) present on the water table beneath the rail yard has a surface area of approximately 30 acres and occupies the same position as it has during the past two years. The diesel plume is derived from different sources than the VOC plume, but the boundaries of the two plumes overlap. Monitoring well free-product thicknesses ranged from 0.16 to 0.97 feet during February 1991. All February

1991 measured free-product thicknesses were less than those measured during February 1990.

Detectable concentrations of TPHs dissolved in the ground water are mostly beneath the diesel plume. Concentrations beneath the plume range from 0.2 to 5.7 parts per million (ppm).

3.0 RESULTS AND DISCUSSION

This section presents the results and interpretations of ground water elevation data, free-product plume thickness data, and ground water sampling data taken from the monitoring well network and city municipal wells during the February 1991 semiannual sampling round.

3.1 Potentiometric Data and Ground Water Flow Directions

Envirocon measured water-table elevations at 51 wells in the Livingston Valley between February 19 and 22, 1991. Water-table elevations and the contoured potentiometric surface are shown on Figure 1.0.

As indicated by the potentiometric contours, ground water flows from the southwest to the northeast under the rail yard, and then flows northward along the Yellowstone River. This February 1991 flow pattern is similar to the flow pattern noted during late winter and early spring of 1990.

3.2 Diesel Plume

The measured thickness and contoured extent of the diesel plume are shown on Figure 2.0. Plume thicknesses under the rail yard range from 0.16 to 0.97 feet. The free-product plume remains in the same position as it has throughout the study.

3.3 Water Quality

The water quality section is separated into discussions on VOC and TPH analytical results.

3.3.1 VOCs

The predominant VOCs detected during the February 1991 sample round were PCE, TCE, DCE, and chlorobenzene. Tables 3.0 and 4.0 summarize the PCE, TCE, DCE, and chlorobenzene concentrations of the past

eight quarterly sampling rounds. Figure 3.0 shows the locations of all sample points and the total CE concentrations and contours. The complete laboratory analytical results are contained in Appendix A.

Notable VOC concentration changes occurred at Wells L-87-2, L-88-10, LS-8, and LS-11. Well L-87-2 was sampled a few days after Test Cell 3 operations ceased. Well L-87-2 is only 50 feet east of the water production well for Test Cell 3, and its VOC concentrations were reduced due to the removal of VOCs during Test Cell 3 operation. VOC concentration changes at Wells L-88-10, LS-8, and LS-11 reflect a slight shift in the position of the VOC plume, due to seasonal shifts in ground water flow directions. Tables 3.0 and 4.0 show the seasonal fluctuations at these wells during the past eight quarterly sampling events.

The sample from Well LS-6 contained 7.2 ppb of n-butylbenzene and 3.0 ppb of sec-butylbenzene. Previous samples from Well LS-6 contained similar concentrations of these and related compounds. One possible source of these detections is the residual free product in the alluvium in the Depot area. However, butylbenzene is a 10-carbon compound and is somewhat light for typical diesel fuel, particularly older diesel fuel such as that present in the alluvium. Another potential source of the butylbenzene is the Tracy Chevron gasoline spill site, located southwest of the Depot area. Recent ground water

TABLE 3.0
Comparison of Quarterly Analytical Results - PCE, TCE, & DCE

WELL NO.	PCE (ug/l)							
	May-89	Aug	Nov	Feb-90	May	Aug	Nov	Feb-91
1		0.62	0.65		<0.5	<0.5	<0.5	<0.5
2		1.3	0.55	0.51	0.66	0.52	0.62	0.5
3	0.69	0.74	0.50		<0.5			
4		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5
5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
6	7.1	4.9	3.6	1.4	2.6	4.6	4.3	1.3
7	33	0.5	0.5	7.9	8	<0.5	<0.5	6.3
8	180	126	123		148		93	130
11		<0.5	<0.5		<0.5	<0.5		
L-87-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-2			1.7	4.9	1.7		2.4	1.9
L-87-3	262	195	200	227	228	100	160	180
L-87-4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-5	335	367	358	238				190
L-87-7		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-8	58	98	86	69	16	48	57	45
L-88-9	<0.5	<0.5	<0.5	<0.5	<0.5			
L-88-10	160	155	165	177	168	127	110	170
L-88-11	<0.5	<0.5	<0.5	<0.5	<0.5			
L-88-12	255	197	250	171	150		320	160
L-88-13	52	80	66	60	54	77	68	66
LS-6	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
LS-7	<0.5	<0.5	<0.5	<0.5	<0.5			
LS-8	146	98	61	124	100	50	74	120
LS-10					<0.5	<0.5		
LS-11	115	23	12	88	86	20	13	61
RAINBOW	35		64	35	24	96		
DEPUY			7.2					
BURNS			<0.5					
POTW	73	46	23	68	99	40	23	66
B-STR.		**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
D-STR.		<0.5			<0.5	<0.5		
L-STR.	<0.5	<0.5	<0.5	<0.5	<0.5			
Q-STR.	0.66	0.95	0.71	0.5	0.76			
CLARENCE		<0.5	<0.5					
WERNER		<0.5	<0.5					
GEYSER TC				<0.5	<0.5	<0.5	<0.5	
LG-10				<0.5	<0.5	<0.5	0.64	<0.5
89-1				10	18	2.4	2	7.3
89-2				<0.5	<0.5	<0.5	<0.5	<0.5
89-3				272	270	430	310	240
89-4				530	530	158	260	340*
89-6				28	28		32	33
89-7				32	20		19	17
89-8				<0.5	<0.5			
89-9					302	330	280	230
89-10					163			160
89-11					<0.5	<0.5	<0.5	<0.5
90-1				385	480			
90-2								
90-3					76	15	18	22
90-4					<0.5			
90-5					<0.5			
90-6							5.9	

TABLE 3.0 (cont.)

WELL NO.	TCE (ug/l)							
	May-89	Aug	Nov	Feb-90	May	Aug	Nov	Feb-91
1		<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3	<0.5	<0.5	<0.5		<0.5			
4		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5
5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
8	9.9	10	5.9		9.1		4.1	6
11		<0.5	<0.5		<0.5	<0.5		
L-87-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-2			24	71	29		22	7
L-87-3	24	17	17	20	18	13	12	18
L-87-4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-5	8.7	15	10	5.1				6.2
L-87-7		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
L-87-8	7.8	11	8.8	18	4.2	18	38	35
L-88-9	<0.5	<0.5	<0.5	<0.5	<0.5			
L-88-10	31	30	26	29	28	19	19	21
L-88-11	<0.5	<0.5	<0.5	<0.5	<0.5			
L-88-12	4.9	4.5	4.1	3.8	2.7		3.5	1.8
L-88-13	7.6	14	12	8.6	7.2	15	13	12
LS-6	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
LS-7	<0.5	<0.5	<0.5	<0.5	<0.5			
LS-8	20	7.8	6.6	19	19	7.1	5.6	18
LS-10					<0.5	<0.5		
LS-11	17	30	23	17	16	20	28	12
RAINBOW	5.2		12	6.6	4.7	15		
DEPUY			1.3					
BURNS			<0.5					
POTW	6.9	2.1	0.69	4.5	8.8	1.6	0.84	3.5
B-STR.		**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
D-STR.		<0.5			<0.5	<0.5		
L-STR.	<0.5	<0.5	<0.5	<0.5	<0.5			
Q-STR.	<0.5	<0.5	<0.5	<0.5	<0.5			
CLARENCE		<0.5	<0.5					
WERNER		<0.5	<0.5					
GEYSER TC				<0.5	<0.5	<0.5	<0.5	
LG-10				<0.5	<0.5	<0.5	<0.5	<0.5
89-1				0.5	2.2	<0.5	<0.5	<0.5
89-2				<0.5	<0.5	<0.5	<0.5	<0.5
89-3				0.56	0.55	0.73	0.67	0.91
89-4				3.9	4.5	3.6	4.1	3.5
89-6				0.86	1		0.83	0.87
89-7				2.5	2.8		1.8	2.3
89-8				<0.5	<0.5			
89-9					8.3	7.9	6.2	6.5
89-10					16			11
89-11					<0.5	<0.5	<0.5	<0.5
90-1				14	14			
90-2								
90-3					8.8	12	6.3	4.5
90-4					<0.5			
90-5					<0.5			
90-6							<0.5	

TABLE 3.0 (cont.)

WELL NO.	DCE (ug/l)							
	May-89	Aug	Nov	Feb-90	May	Aug	Nov	Feb-91
1		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
2		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	<1.0	<1.0	<1.0		<1.0			
4		<1.0		<1.0	<1.0	<1.0	>1.0	<1.0
5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7	2.9	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0
8	17	27	12		24		4.3	7.6
11		<1.0	<1.0		<1.0	<1.0		
L-87-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-2			2571	1164	724		1721	222.4
L-87-3	68	56	37	94	80	21	27	52
L-87-4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-5	5.4	7.8	6.3	3.3				2.7
L-87-7		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-8	3.5	9.3	7.2	12	2.3	14	11	18
L-88-9	<1.0	<1.0	<1.0	<1.0	<1.0			
L-88-10	106	357	441	302	378	334	383	221.8
L-88-11	<1.0	<1.0	<1.0	<1.0	<1.0			
L-88-12	3.5	2.1	2.3	3.2	2.4		1.5	1.1
L-88-13	6.8	24	19	9.9	9.7	34	23	8.8
LS-6	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
LS-7	<1.0	<1.0	<1.0	<1.0	<1.0			
LS-8	84.3	21	13	131.5	128	15	12	113.4
LS-10					<1.0	<1.0		
LS-11	58	122	89	81	88	108	77	95.3
RAINBOW	8.9		64	27	16	99		
DEPUY			<1.0					
BURNS			<1.0					
POTW	9.2	5.5	<1.0	10	36	3.2	<1.0	8
B-STR.		**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
D-STR.		<1.0			<1.0	<1.0		
L-STR.	<1.0	<1.0	<1.0	<1.0	<1.0			
Q-STR.	<1.0	<1.0	<1.0	<1.0	<1.0			
CLARENCE		<1.0	<1.0					
WERNER		<1.0	<1.0					
GEYSER TC				<1.0	<1.0	<1.0	<1.0	
LG-10				<1.0	<1.0	<1.0	<1.0	<1.0
89-1				<1.0	2.2	<1.0	<1.0	<1.0
89-2				<1.0	<1.0	<1.0	<1.0	<1.0
89-3				<1.0	<1.0	1.8	<1.0	<1.0
89-4				5.6	6.6	1.5	3.8	3.6
89-6				1.0	<1.0		<1.0	<1.0
89-7				1.0	<1.0		<1.0	<1.0
89-8				<1.0	<1.0			
89-9					1.9	2.1	1	<1.0
89-10					60			26
89-11					<1.0	<1.0	<1.0	<1.0
90-1				86	17			
90-2								
90-3					51	26	8.7	3.9
90-4					<1.0			
90-5					<1.0			
90-6							<1.0	

* Estimated concentration

** Not sampled due to construction near well

TABLE 4.0

Comparison of Quarterly Analytical Results - Chlorobenzene

WELL NO.	Chlorobenzene							
	May-89	Aug	Nov	Feb-90	May	Aug	Nov	Feb-91
1		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
2		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	<1.0	<1.0	<1.0		<1.0			
4		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0
5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
8	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0
11		<1.0	<1.0		<1.0	<1.0		
L-87-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-2			159	96	91		190	66
L-87-3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-5	<1.0	<1.0	<1.0	<1.0				<1.0
L-87-7		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-87-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
L-88-9	<1.0	<1.0	<1.0	<1.0	<1.0			
L-88-10	8.7	28	43	40	18	26	22	6.6
L-88-11	<1.0	<1.0	<1.0	<1.0	<1.0			
L-88-12	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
L-88-13	<1.0	3.6	1.9	<1.0	<1.0	3.7	2.5	<1.0
LS-6	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
LS-7	<1.0	<1.0	<1.0	<1.0	<1.0			
LS-8	27	<1.0	<1.0	69	30	<1.0	3.3	38
LS-10					<1.0	<1.0		
LS-11	<1.0	167	305	17	7.1	230	270	120
RAINBOW	<1.0		3.5	<1.0	<1.0	1.3		
DEPUY			<1.0					
BURNS			<1.0					
POTW	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
B-STR.		**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
D-STR.		<1.0			<1.0	<1.0		
L-STR.	<1.0	<1.0	<1.0	<1.0	<1.0			
Q-STR.	<1.0	<1.0	<1.0	<1.0	<1.0			
CLARENCE		<1.0	<1.0					
WERNER		<1.0	<1.0					
GEYSER TC				<1.0	<1.0	<1.0	<1.0	
LG-10				<1.0	<1.0	<1.0	<1.0	<1.0
89-1				<1.0	<1.0	<1.0	<1.0	<1.0
89-2				<1.0	<1.0	<1.0	<1.0	<1.0
89-3				<1.0	<1.0	<1.0	<1.0	<1.0
89-4				<1.0	<1.0	<1.0	<1.0	<1.0
89-6				<1.0	<1.0		<1.0	<1.0
89-7				<1.0	<1.0		<1.0	<1.0
89-8				<1.0	<1.0			
89-9					<1.0	<1.0	<1.0	<1.0
89-10					<1.0			<1.0
89-11					<1.0	<1.0	<1.0	<1.0
90-1				8.1	<1.0			
90-2								
90-3					<1.0	<1.0	<1.0	<1.0
90-4					<1.0			
90-5					<1.0			
90-6							<1.0	

** Not sampled due to construction near well

sampling by MDHES at the Tracy Chevron monitor wells should indicate whether butylbenzene and related gasoline-type compounds are present in the Livingston aquifer in this area.

3.3.2 TPHs

February 1991 TPH concentrations are listed on Table 5.0 and are compared with TPH concentrations of the previous seven quarterly sampling rounds. TPH concentrations from wells penetrating the diesel plume (L-87-2, L-87-4, L-87-7, L-87-8, and LS-7) range from 0.2 ppm to 5.7 ppm. As shown on Table 5.0, these results are consistent with previous quarterly results.

The sample from Monitor Well LS-6 had a TPH concentration of 6 ppm. This well penetrates residually contaminated alluvium associated with passenger-train refueling operations and has occasionally contained a hydrocarbon sheen. The TPHs detected in Well LS-6 are derived from this hydrocarbon source.

TPH concentrations in wells outside the free-product plume and the passenger-train refueling area continued to be below 1 ppm, as shown on Table 5.0

TABLE 5.0

TPH CONCENTRATIONS

WELL NO.	TPH (mg/l)							
	May-89	Aug	Nov	Feb-90	May	Aug	Nov	Feb-91
1		<0.1	<0.1		<0.1	<0.1	<0.1	<0.1
2		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3	0.7	<0.1	<0.1		<0.1			
4		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1
5	2.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
6	0.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7	0.6	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
8	3	<0.1	<0.1		<0.1		<0.1	<0.1
11		<0.1	0.2		<0.1	<0.1		
L-87-1	0.8		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
L-87-2			10.6	1.3	1.1		1.2	4.3
L-87-3	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
L-87-4	4.4	0.3	0.9	8.1	0.4	0.9	1.6	0.2
L-87-5	0.6	<0.1	<0.5	<0.1				<0.1
L-87-7		4.2	2	19	4.4	1.5	11.2	1.6
L-87-8	14.8	0.3	2	22.8	34	32	19.4	5.7
L-88-9	0.7	0.1	<0.1	<0.1	<0.1			
L-88-10	0.6	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
L-88-11	0.9	0.2	<0.1	<0.1	<0.1			
L-88-12	0.7	<0.1	<0.1	0.3	<0.1		<0.1	<0.1
L-88-13	2	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1
LS-6	9.9	0.2	<0.1		0.3	1.1	0.7	6
LS-7	4.2	0.9	<0.1	0.3	<0.1			0.3
LS-8	0.8	0.1	<0.1	0.6	<0.1	<0.1	<0.1	<0.1
LS-10					<0.1	<0.1		<0.1
LS-11	0.5	1.7	0.4	0.1	<0.1	1.5	0.4	<0.1
DEPUY			<0.1					
BURNS			<0.1					
RAINBOW			<0.1	<0.1	<0.1	0.2		
POTW			<0.1	0.3	<0.1	<0.1	<0.1	<0.1
B-STR		**	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
D-STR		<0.1			<0.1	<0.1		
L-STR		<0.1	<0.1	<0.1	<0.1			
Q-STR		<0.1	<0.1	<0.1	<0.1			
CLARENCE		<0.1	<0.1					
WERNER		<0.1	<0.1					
GEYSER TC				<0.1	<0.1	<0.1	0.5	
LG-10				<0.1	<0.1	<0.1	<0.1	0.3
89-1				4.5	<0.1	<0.1	<0.1	<0.1
89-2				<0.1	<0.1	<0.1	0.4	<0.1
89-3				<0.1	<0.1	<0.1	<0.1	<0.1
89-4				<0.1	<0.1	<0.1	<0.1	<0.1
89-5						<0.1		
89-6				<0.1	<0.1		<0.1	<0.1
89-7				0.2	<0.1		<0.1	<0.1
89-8				0.4	<0.1			
89-9					<0.1	<0.1	<0.1	<0.1
89-10					<0.1			<0.1
89-11					<0.1	<0.1	<0.1	<0.1
90-1B				0.4	<0.1			
90-3					<0.1	<0.1	<0.1	<0.1
90-4					<0.1			
90-5					<0.1			
90-6							<0.1	

** Not sampled due to construction near well

3.4 Results From the B Street Municipal Water Well

Samples from the B Street Municipal Well were analyzed for VOCs and TPHs. As shown on Tables 3.0, 4.0, and 5.0 and in Appendix A, this well had no detectable VOC or TPH concentrations, which is consistent with previous sample results at this well.

4.0 QA/QC RESULTS

Envirocon followed the QA/QC program outlined in Section 10.0 of the Interim Remedial Measures Work Plan (IRMWP), as amended, during the February 1991 semiannual sampling round. This program includes:

Field QA/QC

- Field duplicates
- MDHES split samples
- Trip blanks
- Equipment decontamination blanks

Laboratory QA/QC

- Spiked analyses
- Laboratory duplicates
- Surrogate analyses

Field QA/QC samples were shipped "blind" to the laboratory and analyzed by EPA Method 524.2.

4.1 Field QA/QC

Four field duplicates, eight MDHES split samples, two trip blanks, and one equipment blank were used to validate field procedures.

4.1.1 Field Duplicates

Field duplicates from Wells 4 (140101-661), L-87-4 (140101-674), 89-3 (140101-681), and 89-7 (140101-695) were sent blind to ELI. As shown in Appendix A, the duplicate analyses show close correlation with the original samples, indicating that field sampling, handling procedures, and laboratory procedures generated reproducible results.

4.1.2 MDHES Split Samples

The MDHES took split samples with Envirocon at Monitor Wells LS-6 (140101-659), 89-2 (140101-668), 89-1 (140101-669), 90-3 (140101-670), 1 (140101-672), L-87-4 (140101-673), L-87-4 duplicate (140101-674), and L-87-2 (140101-675). As shown on Table 6.0, MDHES's and Envirocon's sample results match very well; this indicates that the February 1991 ground water sampling data is precise.

4.1.3 Trip Blanks

As shown in Appendix A, no Method 524.2 analytes were detected in either of the two trip blanks (140101-656 and 140101-689) used during the February 1991 semiannual sampling round. This indicates that sample handling and shipping protocols maintained sample integrity.

TABLE 6.0

ENVIROCON/MDHES SPLIT SAMPLE RESULTS - FEBRUARY 1991

WELL NO.	COMPOUND	MDHES TPH: mg/l Others: ugl	ENVIROCON TPH: mg/l Others: ug/l
LS-6	TPH	4.6	6
	isopropylbenzene	1.3	1.5
	sec-butylbenzene	2.6	3
	n-butylbenzene	N/D	7.2
	napthalene	1.8	N/D(<1.0)
89-2	TPH	N/D	N/D
89-1	TPH	N/D	N/D
	PCE	6.8	7.3
90-3	TPH	N/D	N/D
	cis-DCE	3.5	3.9
	TCE	3.8	4.5
	PCE	17.9	22
1	TPH	N/D	N/D
L-87-4	TPH	N/D (<.1)	0.2
	toluene	0.5	N/D (<1.0)
Dup L-87-4	TPH	N/D (<.1)	0.1
L-87-2	TPH	2.3	4.3
	trans-DCE	1.8	2.4
	cis-DCE	170.6	220
	TCE	5.3	7
	toluene	1.3	1.4
	PCE	1.7	1.9
	chlorobenzene	51.9	66
	ethylbenzene	2.3	2.6
	m+p-xylene	1.6	9.9 (m+p and o xylenes)
	o-xylene	7	
	isopropylbenzene	1.2	1.3
	2-chlorotoluene	113	190
	4-chlorotoluene	8.4	N/D
	1,3,5-trimethylbenzene	0.7	N/D
	1,2,4-trimethylbenzene	9.3	12
	sec-butylbenzene	1.5	1.5
	1,2-dichlorobenzene	3.9	5.2
	1,3-dichlorobenzene	0.5	N/D
	1,4-dichlorobenzene	3.2	4.4
	4-isopropyltoluene	1.9	1.1
	n-butylbenzene	1.1	4.9
	napthalene	17.4	25
	tert-butylbenzene	N/D	1.8
	n-propylbenzene	N/D	1.6

4.1.4 Equipment Blank

One equipment blank, 140101-696, was taken through Envirocon's stainless steel bladder pump. No Method 524.2 analytes, except chloroform, were detected in the sample. This indicates that decontamination procedures are sufficient to avoid cross-contamination. Envirocon interprets the existence of chloroform in this sample to be a result of residual chloroform in the deionized water used for equipment decontamination.

4.2 Laboratory QA/QC

ELI conducted 3 spike analyses, 5 laboratory duplicate analyses, 2 analyses on Environmental Resource Association (ERA) quality control samples, and 45 surrogate analyses to validate laboratory procedures. ELI's QA/QC plan is on file with MDHES.

4.2.1 Spiked Analyses

A spiked analysis was conducted on samples 140101-670, 140101-683, and 140101-689. Results of these analyses are shown in Appendix A. The percent recoveries of the test values are all within an acceptable range. These

results indicate that ELI's laboratory equipment and procedures were acceptable.

4.2.2 Laboratory Duplicate Analyses

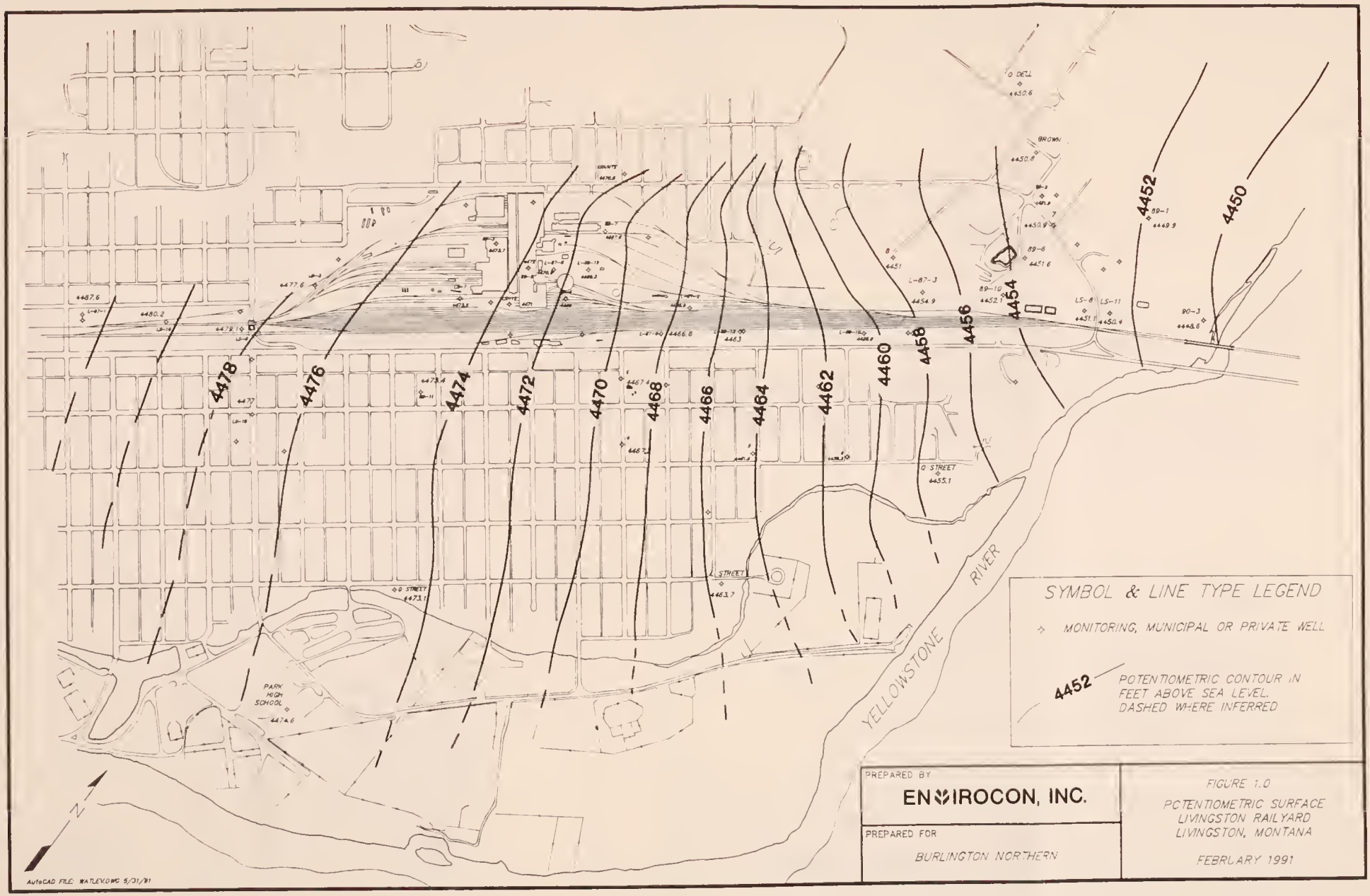
ELI performed a duplicate analysis on Samples 140101-656, 140101-671, 140101-677, 140101-686, and 140101-695. As shown in Appendix A, the concentrations of VOCs reported in the duplicate analyses are very close to those reported in the original sample analyses. This indicates that laboratory equipment and procedures provided reproducible analytical results.

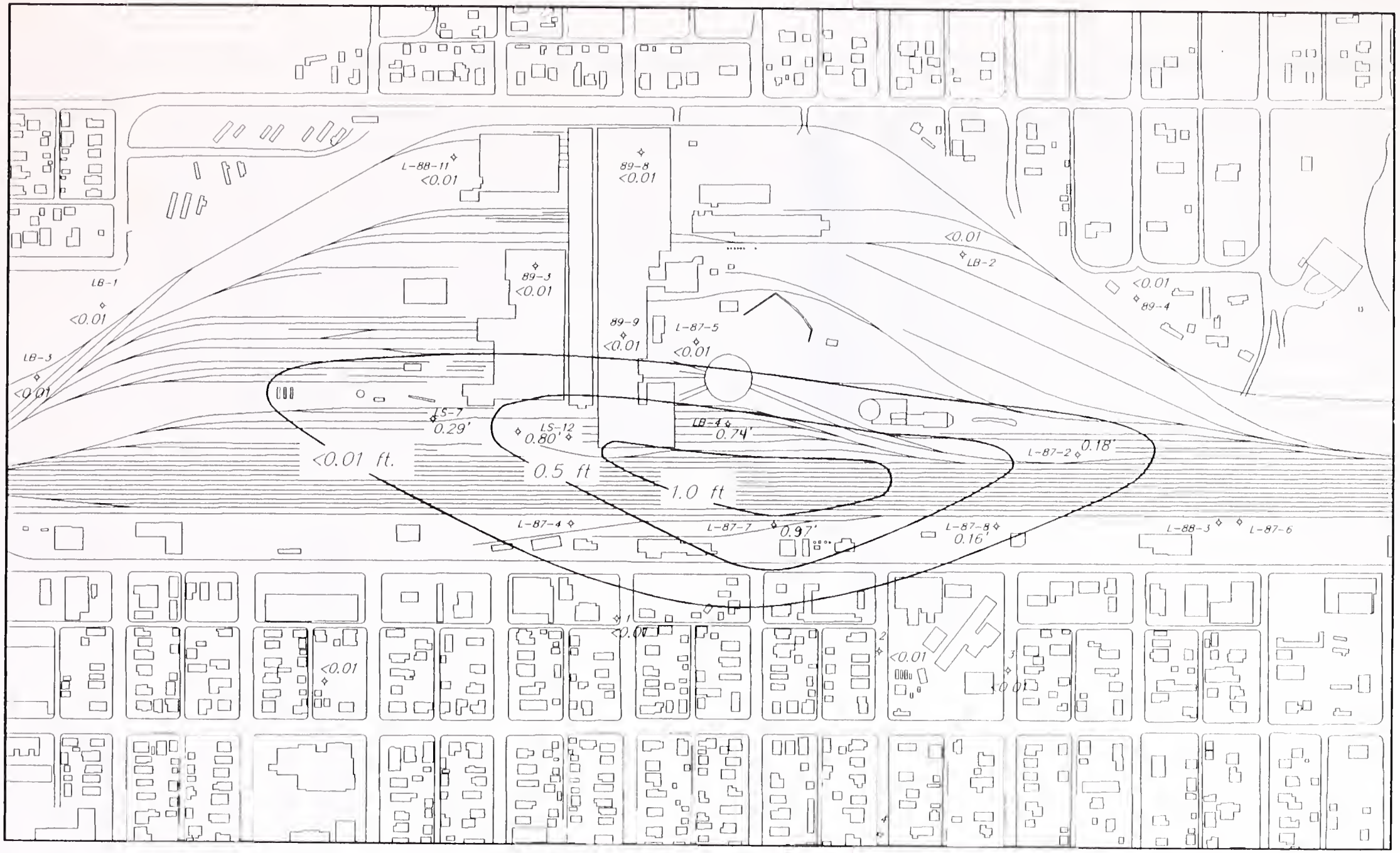
4.2.3 Laboratory Surrogate Analyses

A surrogate analysis was conducted on 45 samples. Results of these analyses are shown in Appendix A. The percent recoveries of the test values are all within an acceptable range. These results indicate that ELI's laboratory equipment and procedures were adequate to provide accurate results.

4.2.4 ERA Water Supply Quality Control Sample Analyses

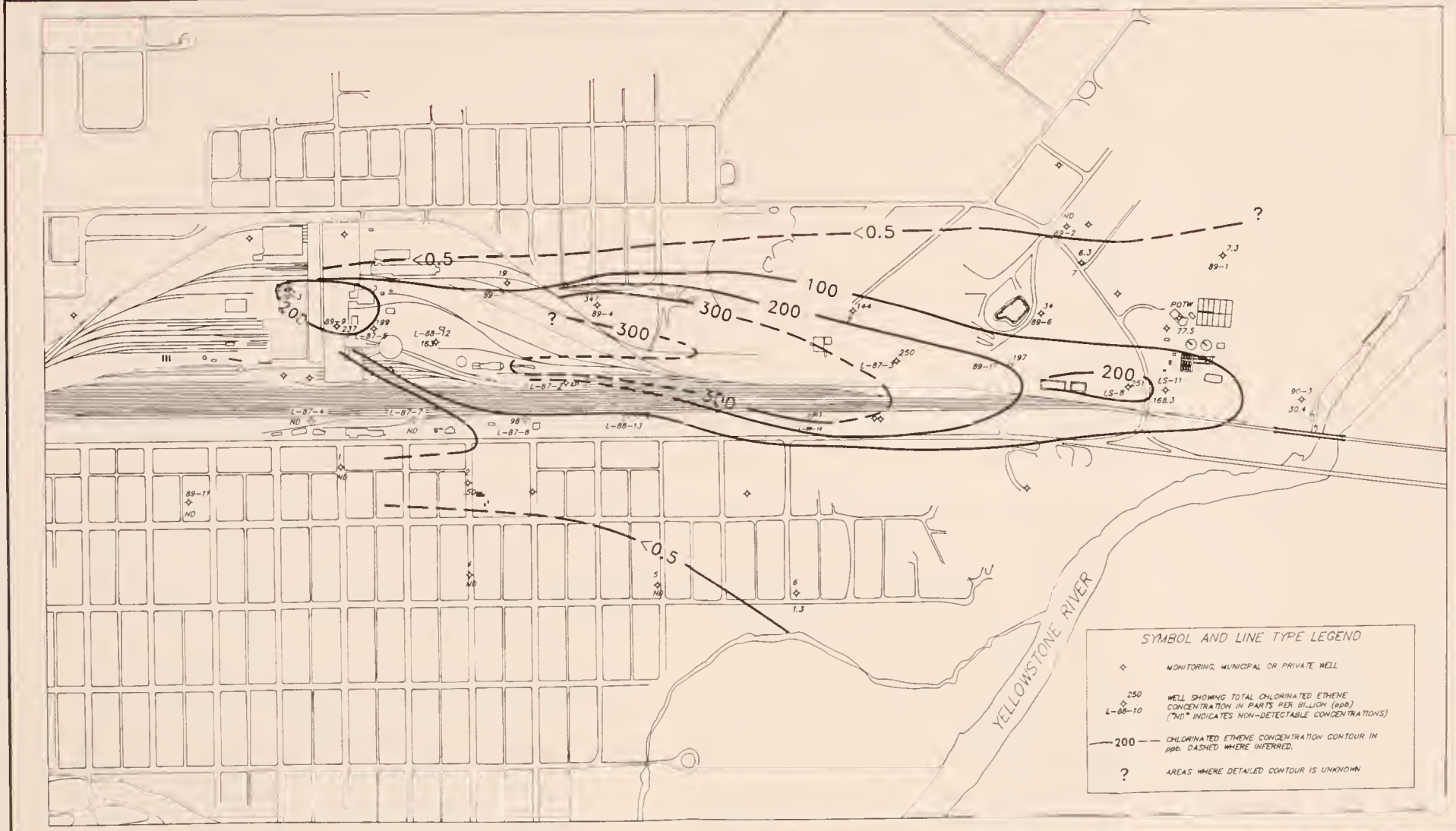
In addition to the spiked analyses, duplicate analyses, and surrogate analyses, ELI also analyzed two samples in conjunction with an ERA water supply quality control sample. The results of these analyses are shown in Appendix A. The analytical results are within the acceptable percentage range, indicating that ELI's analyses are reliable.


4478
4476
4474
4472
4470
4468
4466
4464
4462
4460
4458
4456
4454
4452
4450
O DELL
4450.6
BROWN
4450.8
O STREET
4455.1
STREET
4463.7
O STREET
4473.1
PARK
HIGH
SCHOOL
4474.6
YELLOWSTONE
RIVER
N
SYMBOL & LINE TYPE LEGEND
MONITORING, MUNICIPAL OR PRIVATE WELL
4452
POTENTIOMETRIC CONTOUR IN
FEET ABOVE SEA LEVEL.
DASHED WHERE INFERRED
PREPARED BY
ENVIROCON, INC.
PREPARED FOR
BURLINGTON NORTHERN
FIGURE 1.0
POTENTIOMETRIC SURFACE
LIVINGSTON RAILYARD
LIVINGSTON, MONTANA
FEBRUARY 1991
AutoCAD FILE: WATLEV.DWG 5/31/91



BURLINGTON NORTHERN	FEBRUARY, 1991 SEMI-ANNUAL GROUNDWATER REPORT	MEASURED DIESEL PRODUCT THICKNESS IN MONITORING WELLS
ENVIROCON, INC.	140101	6/25/91 FIGURE 2.0

AutoCAD FILE: G-H20.DWG



BURLINGTON NORTHERN

ENVIROCON, INC.

FEBRUARY 1991
GROUND WATER REPORT
LIVINGSTON RAIL YARD
LIVINGSTON, MONTANA

AutoCAD FILE: JMJ_VOC.DWG 6/28/91

GROUND WATER TOTAL CHLORINATED ETHENE PLUME (PCE, DCE, TCE)

FIGURE 3.0

APPENDIX A

LABORATORY ANALYSES

ENERGY LABORATORIES

ENERGY LABORATORIES, INC.
P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-873-5227

m 3/14/91

RECEIVED
MAR 14 1991
ENVIROCON, Inc.
Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5616-23
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/22/91

Lab No.	Identification	Total Petroleum Hydrocarbons, mg/l (ppm)
91-5616	140101-690 #8 Sampled @ 0900	<0.1
91-5617	140101-691 POTW Sampled @ 0845	<0.1
91-5618	140101-693 89-7 Sampled @ 1211	<0.1
91-5619	140101-694 L-87-5 Sampled @ 1129	<0.1
91-5620	140101-695 89-7 dup. Sampled @ 1215	<0.1
91-5621	140101-697 89-6 Sampled @ 1323	<0.1
91-5622	140101-698 89-10 Sampled @ 1416	<0.1
91-5623	140101-692 LS-10 Sampled @ 1011	<0.1

Q.A. Review: William J Brown

ENERGY LABORATORIES, INC.
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ENVIROCON, Inc.
Livingston, Mt.

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5646 -56
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/21/91

SAMPLE NO.	IDENTIFICATION	TOTAL PETROLEUM HYDROCARBONS, mg/l (ppm)
91-5646	140101-678 89-11 Sampled @ 1005	<0.1
91-5647	140101-679 89-9 Sampled @ 1112	<0.1
91-5648	140101-680 89-3 Sampled @ 1218	<0.1
91-5649	140101-681 89-3 dup Sampled @ 1220	<0.1
91-5650	140101-682 89-4 Sampled @ 1320	<0.1
91-5651	140101-683 L-87-7 Sampled @ 1356	1.6
91-5652	140101-684 L-87-8 Sampled @ 1428	5.7
91-5653	140101-685 L-88-13 Sampled @ 1516	<0.1
91-5654	140101-686 L-88-10 Sampled @ 1539	<0.1
91-5655	140101-687 LS-8 Sampled @ 1623	<0.1
91-5656	140101-688 B Street Sampled @ 1654	<0.1

Q.A. Review: William J Brown

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

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MAR 08 1991
ENVIROCON, Inc.
Livingston, Mt.

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5437-44
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91
SAMPLE DATE	02/20/91

Lab No.	Identification	Total Petroleum Hydrocarbons, mg/l (ppm)
91-5437	140101-668 Sampled @ 9:55	<0.1
91-5438	140101-669 Sampled @ 10:52	<0.1
91-5439	140101-670 Sampled @ 11:55	<0.1
91-5440	140101-671 Sampled @ 12:27	<0.1
91-5441	140101-672 Sampled @ 14:17	<0.1
91-5442	140101-673 Sampled @ 14:55	0.2
91-5443	140101-674 Sampled @ 14:50	0.1
91-5444	140101-675 Sampled @ 16:05	4.3

Q.A. Review: _____

ENERGY LABORATORIES, INC.
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MAR 0 8 1991
ENVIROCON, INC.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5445-450
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91

Lab No.	Identification	Total Petroleum Hydrocarbons, mg/l (ppm)
91-5445	140101-663, Sampled 02/19/91 @ 1515	<0.1
91-5446	140101-664, Sampled 02/19/91 @ 1535	<0.1
91-5447	140101-665, Sampled 02/19/91 @ 1605	<0.1
91-5448	140101-666, Sampled 02/19/91 @ 1656	<0.1
91-5449	140101-676, Sampled 02/20/91 @ 1651	<0.1
91-5450	140101-677, Sampled 02/20/91 @ 1748	<0.1

Q.A. Review: Jon Strachan

ENERGY LABORATORIES, INC.
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M 3/6/91
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MAR 0 6 1991
ENVIROCON, Inc.
Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5431-36
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/05/91
SAMPLE DATE	02/19/91

Lab No.	Identification	Total Petroleum Hydrocarbons, mg/l (ppm)
91-5431	140101-657 LS-7 Sampled @ 1005	0.3
91-5432	140101-658 L-87-1 Sampled @ 1104	<0.1
91-5433	140101-659 LS-6	6.0
91-5434	140101-660 LG-10 Sampled @ 1350	0.3
91-5435	140101-661 #4 Sampled @ 1445	<0.1
91-5436	140101-662 #4 Sampled @ 1445	<0.1

Q.A. Review: Jon Stanley

ENERGY LABORATORIES, INC.
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MAR 14 1991
ENVIROCON, Inc.
Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

	89-7 dup	89-6	89-10
LAB NO.	91-5620	91-5621	91-5622
SAMPLE IDENTIFICATION	140101-695	140101-697	140101-698
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	1215	1323	1416
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	26
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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ENVIROCON
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LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5620	91-5621	91-5622
SAMPLE IDENTIFICATION	140101-695	140101-697	140101-698
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	1215	1323	1416
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	16	33	160
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	2.3	0.87	11
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: William T. Brown

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ENVIROCON
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LIVINGSTON MT 59047

Water Analysis

89-7

PROJECT: Livingston / BN

	Duplicate
LAB NO.	91-5620
SAMPLE IDENTIFICATION	140101-695
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/22/91
SAMPLE TIME	1215
CONSTITUENT	ug/l
Benzene	<0.50
Bromobenzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
n-Butylbenzene	<1.0
sec-Butylbenzene	<1.0
tert-Butylbenzene	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
1,2-Dibromo-3-chloropropane	<1.0
Dibromochloromethane	<1.0
1,2-Dibromoethane	<1.0
Dibromomethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
Dichlorodifluoromethane	<1.0
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	<1.0
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0

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Water Analysis

PROJECT: Livingston / BN

89-7

PAGE 2

	Duplicate
LAB NO.	91-5620
SAMPLE IDENTIFICATION	140101-695
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/22/91
SAMPLE TIME	1215
CONSTITUENT	ug/l
1,3-Dichloropropane	<1.0
2,2-Dichloropropane	<1.0
1,1-Dichloropropene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Ethylbenzene	<1.0
Hexachlorobutadiene	<1.0
Isopropylbenzene	<1.0
p-Isopropyltoluene	<1.0
Methylene chloride	<1.0
Naphthalene	<1.0
n-Propylbenzene	<1.0
Styrene	<1.0
1,1,1,2-Tetrachloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	17
Toluene	<1.0
1,2,3-Trichlorobenzene	<1.0
1,2,4-Trichlorobenzene	<1.0
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	2.5
Trichlorofluoromethane	<1.0
1,2,3-Trichloropropane	<1.0
1,2,4-Trimethylbenzene	<1.0
1,3,5-Trimethylbenzene	<1.0
Vinyl chloride	<0.50
Xylenes	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

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	POTW	89-7	L-87-5
LAB NO.	91-5617	91-5618	91-5619
SAMPLE IDENTIFICATION	140101-691	140101-693	140101-694
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	0845	1211	1129
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	8.0	<1.0	2.7
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

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	POTW	89-7	L-87-5
LAB NO.	91-5617	91-5618	91-5619
SAMPLE IDENTIFICATION	140101-691	140101-693	140101-694
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	0845	1211	1129
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	66	17	190
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	3.5	2.3	6.2
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: William T. Bro

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Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5614	91-5615	91-5616
SAMPLE IDENTIFICATION	140101-689	140101-696	140101-690
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	0745	1230	0900
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	7.2	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	7.6
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	Trip Blank	Equipment Blank	#8
LAB NO.	91-5614	91-5615	91-5616
SAMPLE IDENTIFICATION	140101-689	140101-696	140101-690
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/22/91	02/22/91	02/22/91
SAMPLE TIME	0745	1230	0900
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	<0.50	130
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	<0.50	6.0
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: William J Brown

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

	LS-8	B-Street
LAB NO.	91-5655	91-5656
SAMPLE IDENTIFICATION	140101-687	140101-688
SAMPLE SUBMITTED	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91
SAMPLE TIME	1623	1654
CONSTITUENT	ug/l	ug/l
Benzene	<0.50	<0.50
Bromobenzene	<1.0	<1.0
Bromochloromethane	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0
Bromoform	<1.0	<1.0
Bromomethane	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50
Chlorobenzene	38	<1.0
Chloroethane	<1.0	<1.0
Chloroform	<1.0	<1.0
Chloromethane	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0
Dibromomethane	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0
1,4-Dichlorobenzene	5.4	<0.50
Dichlorodifluoromethane	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50
cis-1,2-Dichloroethene	110	<1.0
trans-1,2-Dichloroethene	3.4	<1.0
1,2-Dichloropropane	<1.0	<1.0

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PAGE 2

	LS-8	B Street
LAB NO.	91-5655	91-5656
SAMPLE IDENTIFICATION	140101-687	140101-688
SAMPLE SUBMITTED	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91
SAMPLE TIME	1623	1654
CONSTITUENT	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0
Ethylbenzene	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0
Methylene chloride	<1.0	<1.0
Naphthalene	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0
Styrene	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0
Tetrachloroethene	120	<0.50
Toluene	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0
Trichloroethene	18	<0.50
Trichlorofluoromethane	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0
Vinyl chloride	<0.50	<0.50
Xylenes	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review:

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

	L-87-8	L-88-13	L-88-14
LAB NO.	91-5652	91-5653	91-5654
SAMPLE IDENTIFICATION	140101-684	140101-685	140101-686
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1428	1516	1539
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	6.6
Chloroethane	<1.0	<1.0	<1.0
Chloroform	4.6	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	2.3
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	18	8.8	220
trans-1,2-Dichloroethene	<1.0	<1.0	1.8
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	L-87-8	L-88-13	L-88-10
LAB NO.	91-5652	91-5653	91-5654
SAMPLE IDENTIFICATION	140101-684	140101-685	140101-686
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1428	1516	1539
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	45	66	170
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	35	12	21
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: William T. Brown

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LIVINGSTON MT 59047

Water Analysis

L-88-10 Lab

PROJECT: Livingston / BN

	Duplicate
LAB NO.	91-5654
SAMPLE IDENTIFICATION	140101-686
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/21/91
SAMPLE TIME	1539
CONSTITUENT	ug/l
Benzene	<0.50
Bromobenzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
n-Butylbenzene	<1.0
sec-Butylbenzene	<1.0
tert-Butylbenzene	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	6.6
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
1,2-Dibromo-3-chloropropane	<1.0
Dibromochloromethane	<1.0
1,2-Dibromoethane	<1.0
Dibromomethane	<1.0
1,2-Dichlorobenzene	1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	1.6
Dichlorodifluoromethane	<1.0
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	230
trans-1,2-Dichloroethene	1.7
1,2-Dichloropropane	<1.0

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L-88-10

PAGE 2

	Duplicate
LAB NO.	91-5654
SAMPLE IDENTIFICATION	140101-686
SAMPLE SUBMITTED	02/25/91
DATE REPORTED	03/13/91
SAMPLE DATE	02/21/91
SAMPLE TIME	1539
CONSTITUENT	ug/l
1,3-Dichloropropane	<1.0
2,2-Dichloropropane	<1.0
1,1-Dichloropropene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Ethylbenzene	<1.0
Hexachlorobutadiene	<1.0
Isopropylbenzene	<1.0
p-Isopropyltoluene	<1.0
Methylene chloride	<1.0
Naphthalene	<1.0
n-Propylbenzene	<1.0
Styrene	<1.0
1,1,1,2-Tetrachloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	150
Toluene	<1.0
1,2,3-Trichlorobenzene	<1.0
1,2,4-Trichlorobenzene	<1.0
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	19
Trichlorofluoromethane	<1.0
1,2,3-Trichloropropane	<1.0
1,2,4-Trimethylbenzene	<1.0
1,3,5-Trimethylbenzene	<1.0
Vinyl chloride	<0.50
Xylenes	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: William Brown

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Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5649	91-5650	91-5651
SAMPLE IDENTIFICATION	140101-681	140101-682	140101-683
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1220	1320	1356
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	0.52
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	5.2
sec-Butylbenzene	<1.0	<1.0	5.5
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	3.6	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	89-3 Ewg	89-4	L-87-7
LAB NO.	91-5649	91-5650	91-5651
SAMPLE IDENTIFICATION	140101-681	140101-682	140101-683
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1220	1320	1356
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	3.1
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	6.6
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	12
n-Propylbenzene	<1.0	<1.0	1.8
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	230	340*	<0.50
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	0.90	3.5	<0.50
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

±10% (per phone conversation 4/2/91 w/ Cam)

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

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*Estimated concentration. Constituent concentration was beyond the upper range of the calibration curve. Only one vial was available for analysis and no water was saved for dilution purposes.

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ENVIROCON
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Water Analysis

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	89-11	89-9	89-3
LAB NO.	91-5646	91-5647	91-5648
SAMPLE IDENTIFICATION	140101-678	140101-679	140101-680
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1005	1112	1218
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	89-11	89-9 ~~89-8~~	89-3
LAB NO.	91-5646	91-5647	91-5648
SAMPLE IDENTIFICATION	140101-678	140101-679	140101-680
SAMPLE SUBMITTED	02/25/91	02/25/91	02/25/91
DATE REPORTED	03/13/91	03/13/91	03/13/91
SAMPLE DATE	02/21/91	02/21/91	02/21/91
SAMPLE TIME	1005	1112	1218
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	230	240
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	6.5	0.91
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: _____

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ENVIROCON, Inc.
Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5449
SAMPLE IDENTIFICATION	140101-676
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91
REVISED DATE	04/04/91
SAMPLE DATE	02/20/91
SAMPLE TIME	1651
CONSTITUENT	ug/l
Benzene	<0.50
Bromobenzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
n-Butylbenzene	<1.0
sec-Butylbenzene	<1.0
tert-Butylbenzene	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
1,2-Dibromo-3-chloropropane	<1.0
Dibromochloromethane	<1.0
1,2-Dibromoethane	<1.0
Dibromomethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
Dichlorodifluoromethane	<1.0
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	52
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

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Livingston, Mt.

Water Analysis

PROJECT: Livingston / BN

PAGE 2

LAB NO.	91-5449
SAMPLE IDENTIFICATION	140101-676
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91
REVISED DATE	04/04/91
SAMPLE DATE	02/20/91
SAMPLE TIME	1651
CONSTITUENT	ug/l
1,3-Dichloropropane	<1.0
2,2-Dichloropropane	<1.0
1,1-Dichloropropene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Ethylbenzene	<1.0
Hexachlorobutadiene	<1.0
Isopropylbenzene	<1.0
p-Isopropyltoluene	<1.0
Methylene chloride	<1.0
Naphthalene	<1.0
n-Propylbenzene	<1.0
Styrene	<1.0
1,1,1,2-Tetrachloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	180
Toluene	<1.0
1,2,3-Trichlorobenzene	<1.0
1,2,4-Trichlorobenzene	<1.0
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	18
Trichlorofluoromethane	<1.0
1,2,3-Trichloropropane	<1.0
1,2,4-Trimethylbenzene	<1.0
1,3,5-Trimethylbenzene	<1.0
Vinyl chloride	<0.50
Xylenes	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.
Q.A. Review: Jan Stubbs

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PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5448	91-5449	91-5450
SAMPLE IDENTIFICATION	140101-666	140101-676	140101-677
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/19/91	02/20/91	02/20/91
SAMPLE TIME	1656	1651	1748
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	2.1	1.1
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

PAGE 2

#7 Not Valid ~~L873~~ L8[illegible]

LAB NO.	91-5448	91-5449	91-5450
SAMPLE IDENTIFICATION	140101-666	140101-676	140101-677
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/19/91	02/20/91	02/20/91
SAMPLE TIME	1656	1651	1748
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	6.3	7.3	160
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	0.61	1.8
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: [signature]

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

	Duplicate
LAB NO.	91-5450
SAMPLE IDENTIFICATION	140101-677
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91
SAMPLE DATE	02/20/91
SAMPLE TIME	1748
CONSTITUENT	ug/l
Benzene	<0.50
Bromobenzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
n-Butylbenzene	<1.0
sec-Butylbenzene	<1.0
tert-Butylbenzene	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
1,2-Dibromo-3-chloropropane	<1.0
Dibromochloromethane	<1.0
1,2-Dibromoethane	<1.0
Dibromomethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
Dichlorodifluoromethane	<1.0
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	1.1
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0

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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

Lab Dup of L88-12

	Duplicate
LAB NO.	91-5450
SAMPLE IDENTIFICATION	140101-677
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/06/91
SAMPLE DATE	02/20/91
SAMPLE TIME	1748
CONSTITUENT	ug/l
1,3-Dichloropropane	<1.0
2,2-Dichloropropane	<1.0
1,1-Dichloropropene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Ethylbenzene	<1.0
Hexachlorobutadiene	<1.0
Isopropylbenzene	<1.0
p-Isopropyltoluene	<1.0
Methylene chloride	<1.0
Naphthalene	<1.0
n-Propylbenzene	<1.0
Styrene	<1.0
1,1,1,2-Tetrachloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	160
Toluene	<1.0
1,2,3-Trichlorobenzene	<1.0
1,2,4-Trichlorobenzene	<1.0
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	1.9
Trichlorofluoromethane	<1.0
1,2,3-Trichloropropane	<1.0
1,2,4-Trimethylbenzene	<1.0
1,3,5-Trimethylbenzene	<1.0
Vinyl chloride	<0.50
Xylenes	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: Jan Stanchi

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Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5443	91-5444	91-5440
SAMPLE IDENTIFICATION	140101-674	140101-675	140101-671
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	14:50	16:05	12:27
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	4.9	<1.0
sec-Butylbenzene	<1.0	1.5	<1.0
tert-Butylbenzene	<1.0	1.8	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	66	120
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	190	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	5.2	1.1
1,3-Dichlorobenzene	<1.0	<1.0	1.9
1,4-Dichlorobenzene	<0.50	4.4	33
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	220	89
trans-1,2-Dichloroethene	<1.0	2.4	5.8
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

LAB NO.	91-5443	91-5444	Duplicate 91-5440
SAMPLE IDENTIFICATION	140101-674	140101-675	140101-671
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	14:50	16:05	12:27
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	2.6	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	1.3	<1.0
p-Isopropyltoluene	<1.0	1.1	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	25	<1.0
n-Propylbenzene	<1.0	1.6	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	1.9	57
Toluene	<1.0	1.4	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	7.0	14
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	12	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	9.9	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: _____

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ENVIROCON
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LIVINGSTON MT 59047

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ENVIROCON, INC.
Livingston, MT

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5440	91-5441	91-5442
SAMPLE IDENTIFICATION	140101-671	140101-672	140101-673
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	12:27	14:17	14:55
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	120	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	1.1	<1.0	<1.0
1,3-Dichlorobenzene	1.8	<1.0	<1.0
1,4-Dichlorobenzene	35	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	90	<1.0	<1.0
trans-1,2-Dichloroethene	5.3	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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ENVIROCON, Inc
Livingston, Mt.

Water Analysis

PROJECT: Livingston / BN

PAGE 2

LAB NO.	91-5440	91-5441	91-5442
SAMPLE IDENTIFICATION	140101-671	140101-672	140101-673
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	12:27	14:17	14:55
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	61	<0.50	<0.50
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	12	<0.50	<0.50
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: _____

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Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5437	91-5438	91-5439
SAMPLE IDENTIFICATION	140101-668	140101-669	140101-670
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	9:55	10:52	11:55
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	3.9
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	09-2	89-1	90-3
LAB NO.	91-5437	91-5438	91-5439
SAMPLE IDENTIFICATION	140101-668	140101-669	140101-670
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/20/91	02/20/91	02/20/91
SAMPLE TIME	9:55	10:52	11:55
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	7.3	22
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	<0.50	4.5
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: _____

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Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5445	91-5446	91-5447
SAMPLE IDENTIFICATION	140101-663	140101-664	140101-665
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	1515	1535	1605
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

	#2	#5	#6
LAB NO.	91-5445	91-5446	91-5447
SAMPLE IDENTIFICATION	140101-663	140101-664	140101-665
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/06/91	03/06/91	03/06/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	1515	1535	1605
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	0.50	<0.50	1.3
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	<0.50	<0.50
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: [signature]

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ENVIROCON
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LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5434	91-5435	91-5436
SAMPLE IDENTIFICATION	140101-660	140101-661	140101-662
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/05/91	03/05/91	03/05/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	1350	1445	1445
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	LG-10	#4	#4
LAB NO.	91-5434	91-5435	91-5436
SAMPLE IDENTIFICATION	140101-660	140101-661	140101-662
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/05/91	03/05/91	03/05/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	1350	1445	1445
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	<0.50	<0.50
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	<0.50	<0.50
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: for Stanley

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LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

LAB NO.	91-5430	91-5432	91-5433
SAMPLE IDENTIFICATION	140101-656	140101-658	140101-659
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/05/91	03/05/91	03/05/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	0945	1104	N/A
CONSTITUENT	ug/l	ug/l	ug/l
Benzene	<0.50	<0.50	<0.50
Bromobenzene	<1.0	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	7.2
sec-Butylbenzene	<1.0	<1.0	3.0
tert-Butylbenzene	<1.0	<1.0	<1.0
Carbon tetrachloride	<0.50	<0.50	<0.50
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0
1,2-Dichloroethane	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0

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Water Analysis

PROJECT: Livingston / BN

PAGE 2

	Lab Blank	L-87-1	LS-6
LAB NO.	91-5430	91-5432	91-5433
SAMPLE IDENTIFICATION	140101-656	140101-658	140101-659
SAMPLE SUBMITTED	02/21/91	02/21/91	02/21/91
DATE REPORTED	03/05/91	03/05/91	03/05/91
SAMPLE DATE	02/19/91	02/19/91	02/19/91
SAMPLE TIME	0945	1104	N/A
CONSTITUENT	ug/l	ug/l	ug/l
1,3-Dichloropropane	<1.0	<1.0	<1.0
2,2-Dichloropropane	<1.0	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0
Hexachlorobutadiene	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	1.5
p-Isopropyltoluene	<1.0	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0
Naphthalene	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0
Tetrachloroethene	<0.50	<0.50	<0.50
Toluene	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<1.0	<1.0	<1.0
Trichloroethene	<0.50	<0.50	<0.50
Trichlorofluoromethane	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0
Vinyl chloride	<0.50	<0.50	<0.50
Xylenes	<1.0	<1.0	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: Jon Stanley

ENERGY LABORATORIES, INC.
P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-873-5227

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ENVIROCON, Inc.
Livingston, Mt.

ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

Liq. Blank 2

	Duplicate
LAB NO.	91-5430
SAMPLE IDENTIFICATION	140101-656
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/05/91
SAMPLE DATE	02/19/91
SAMPLE TIME	0945
CONSTITUENT	ug/l
Benzene	<0.50
Bromobenzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
n-Butylbenzene	<1.0
sec-Butylbenzene	<1.0
tert-Butylbenzene	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
2-Chlorotoluene	<1.0
4-Chlorotoluene	<1.0
1,2-Dibromo-3-chloropropane	<1.0
Dibromochloromethane	<1.0
1,2-Dibromoethane	<1.0
Dibromomethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
Dichlorodifluoromethane	<1.0
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	<1.0
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0

ENERGY LABORATORIES, INC.
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ENVIROCON, Inc.
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ENVIROCON
PO BOX 1154
LIVINGSTON MT 59047

Water Analysis

PROJECT: Livingston / BN

PAGE 2

	Duplicate
LAB NO.	91-5430
SAMPLE IDENTIFICATION	140101-656
SAMPLE SUBMITTED	02/21/91
DATE REPORTED	03/05/91
SAMPLE DATE	02/19/91
SAMPLE TIME	0945
CONSTITUENT	ug/l
1,3-Dichloropropane	<1.0
2,2-Dichloropropane	<1.0
1,1-Dichloropropene	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Ethylbenzene	<1.0
Hexachlorobutadiene	<1.0
Isopropylbenzene	<1.0
p-Isopropyltoluene	<1.0
Methylene chloride	<1.0
Naphthalene	<1.0
n-Propylbenzene	<1.0
Styrene	<1.0
1,1,1,2-Tetrachloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	<0.50
Toluene	<1.0
1,2,3-Trichlorobenzene	<1.0
1,2,4-Trichlorobenzene	<1.0
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	<0.50
Trichlorofluoromethane	<1.0
1,2,3-Trichloropropane	<1.0
1,2,4-Trimethylbenzene	<1.0
1,3,5-Trimethylbenzene	<1.0
Vinyl chloride	<0.50
Xylenes	<1.0

REMARKS: Sample was properly preserved and in specified container. Sample was analyzed in accordance with EPA Method 524.2.

Q.A. Review: _____